GMAT FORMULAS

Summation Formula = $\frac{\text{Number of numbers}}{2} * (f + l)$, where number of numbers = f – l + 1

Percent Change = Difference/Original

Rectangular Solid Volume = L*W*H

Cube Volume = S*S*S

Cylinder Volume = PieRsquaredH

Surface Area (Combined area of all the surfaces, or faces, of a solid)

Surface Area of Rectangular Solid = 2lw + 2lh + 2wh

Surface Area of a Cube = 6ssquared

Principal + Interest = principal * (1+r)>t, where

Total = Group 1 + Group 2 – Both + Neither

Quadratics

- $(x + y)^2 = x^2 + 2xy + y^2$
- $(x – y)^2 = x^2 – 2xy + y^2$
- $(x + y)(x – y) = x^2 – y^2$

Number of permutations (different arrangements when order matters) = $\frac{n!}{(n-r)!}$

Number of combinations (arrangements when order doesn't matter) = $\frac{n!}{r!(n-r)!}$

where n = number of objects in the source group
where r = number of objects selected

The length of a given side must be greater than the difference of the other two sides and less than the sum of the other two sides.